CM 20480 – CITRATE AZIDE AGAR

INTENDED USE
For selective cultivation of Enterococci in dairy products.

PRODUCT SUMMARY AND EXPLANATION
Enterococci maybeconsidered an essentialpart of the autochthonous microflora of humans and animals. Enterococcus faecalis and Enterococcus faecium are relatively heat-resistant and may characteristically survive in traditional milk pasteurization procedures. Most of the Enterococci are relatively resistant to freezing, and, unlike Escherichia coli, they readily survive this treatment. Citrate Azide Agar is a selective media for the identification of Enterococci in dairy, water and other foodstuffs.

COMPOSITION

Ingredients	Gms / Ltr
Yeast extract	10.000
Tryptone	10.000
Sodium citrate	20.000
Sodium azide	0.400
Tetrazolium blue	0.010
Agar	15.000

PRINCIPLE
Tryptoneand yeast extract in the medium provide nitrogen, carbon, long chain amino acids, vitamins and other essential growth nutrients. The high concentrations of sodium citrate inhibit the growth of the accompanying microbial flora. Tetrazolium blue is reduced by Enterococci to form blue coloured colonies. Sodium azide helps in the selective isolation of Enterococci.

INSTRUCTION FOR USE
Dissolve 55.41 gramsin 1000 ml purified / distilled water.
Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE.
Overheating will destroy the selective properties. Cool to 45 - 50°C.
Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured (may have slight blue tinge), clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 7.0±0.2

INTERPRETATION
Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Enterococcus faecalis	33186	50-100	Good-luxuriant	>=50%	Blue	35-37°C	18-24 Hours
Escherichia coli	25922	$>=10^4$	Inhibited	0%	-	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	$>10^4$	Inhibited	0%	-	35-37°C	18-24 Hours
Enterococcus faecalis	29212	50-100	Good-luxuriant	>=50%	Blue	35-37°C	18-24 Hours

PACKAGING:

Inpacksizeof100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

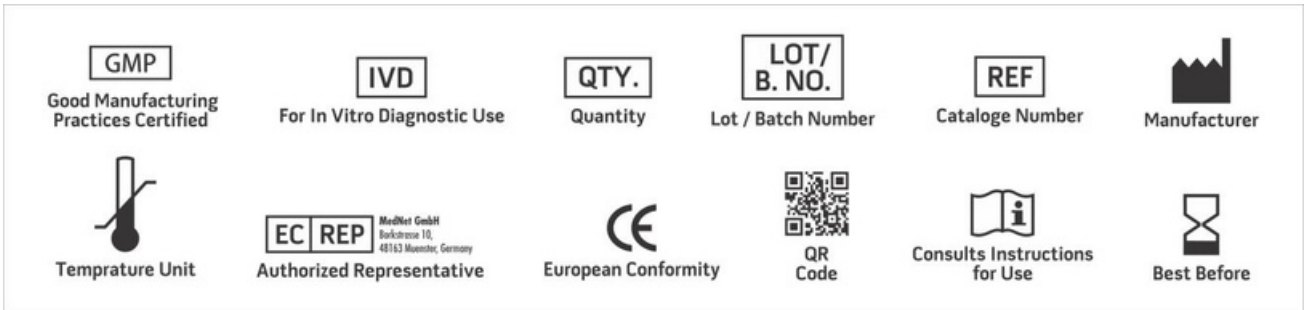
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Frank&Yousef,2004, Standard Methods for the Examination of Dairy Products,17th Ed.
2. Vanderzant C. and Splittstoesser D. F., (Eds.), 1992, Compendium of Methods for the Microbiological Examination of Foods, 3rd Ed., APHA, Washington, D.C.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only